VOILA! MASTERS REVEAL THEIR METHODS

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At the international "Masters of Animation" Festival in Seattle, Washington, a conclave of animation masters from around the world presented their films and participated in panel discussions, revealing many insights about their animation methods:

Short-cuts are important to animators. Even Disney animators rarely create separate drawings for each frame of film. The standard is to expose two frames of film for each new image, resulting in 12 drawings per second at 24 fps. The flicker-fusion frequency, where we begin to see continuous movement, is about 7 fps, so 12 fps works fine. More economical animators are pushing it even further. Rose Bond, for example, told me she animates on threes (8 fps). Do you wonder how Bill Plympton can make his films so cheaply? Apparently he animates on *fours*, as indicated by his statement in a panel discussion about making six drawings per second. Conventional wisdom might say that's animating at an unsafe speed -- but clearly it can be made to work.

Diverse technologies converge in the making of most animation today -- even with films whose methods appear to be "pure." Joan Gratz from Portland, Oregon, paints with plasticine mixed with oil. Her Oscar-winning *Mona Lisa Descending a Staircase* took five years of animating time directly under the camera. Rose Bond, also from Portland, traces her drawings directly onto film, creating cameraless figurative animation of stories. These techniques would seem to be about as far removed from digital or computer-assisted animation as you can get. Yet both of these innovators revealed an important part of their technique: optical printing. Both of them "shoot on ones" and then run the original images through optical printers, where the timing can then be flexibly adjusted to shoot on twos or threes, and to make holds. Joan Gratz even superimposes offset adjoining frames to smooth out the movements. Bearing this in mind, then, these "direct" techniques are not so direct after all -- in fact, they have far more in common with 2-D computer animation than it would appear on the surface.

During the panel discussion of stop-motion animators, most of them expressed their fears of the demise of their industry at the hands of 3D computer animation -- the prime index being Barry Purves' tragic

experience with *Mars Attacks*. Many tried to articulate what they thought was superior about puppet animation over CGI. Ironically, it was the usually reclusive Bruce Bickford (Frank Zappa's films) who spoke out with the most pointed statement: "The impression of it being stop motion is precisely what gives it its excitement. There's an unreality about it." Ray Harryhausen (*Clash of the Titans*) concurred: "It's the dreamlike quality of it. That's what makes it fantasy. Computer pseudorealism doesn't give that."

Barry Purves (UK) inspired the audience with his impassioned descriptions of the sensual art of "directing" his elaborate puppets. He let us handle these expensive puppets: the original alien from *Mars Attacks*, the statue-like figure of Achilles, and his "14-inch Willy" (Shakespeare) from *Next*. It was an astonishing feeling, a very direct connection with the "actors" in puppet animation. Puppets are usually held intimately by the animator's hand for every increment -- a strong contrast to the separation from the animated flow experienced with most types of animation. I could suddenly understand what entices so many animators into puppet animation.

Jim Blashfield's cutout animation method was almost hard to believe until he proved it with a documentary slide presentation. Rotating 3D figures, such as the boy in the bubble for his Paul Simon music video, were created by a ring of about 12 still cameras that would simultaneously capture, from different angles, the image of a baby thrown into the air. Each photo is then cut out and inserted in sequence into a thick mix of cutout layers. For fun he showed a film made this way of a man being showered with milk. We found ourselves dollying in a circle around a 3D frozen moment of time. Very eerie. [Note: since publication of this article, this technique seems to be cropping up all over the place in television advertisments.]

Russian animator Igor Kovalyov (USA - *Rug Rats*) revealed a surprising esthetic approach. When questioned persistently by the audience about the meaning of his Bunuel-like, surrealist animation of enigmatic relationships, his answer was simple but emphatic: "I care only about timing," he said.

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